

wherein upon actuation of the needle retainer, the biasing element displaces the needle rearwardly so that the sharpened tip of the needle is enclosed within the shield, wherein the shield is substantially puncture resistant wherein the axial force required to buckle the shield is less than the force necessary to puncture the shield with the needle to prevent inadvertent contact with the contaminated needle.

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2. A method for infusing fluid into a patient with a medical device having a needle and a shield, comprising the steps of:
inserting the needle and shield into the patient;
retracting the needle into the shield; and
infusing fluid through the shielded needle into the patient.

A2

5. A method for transfusing one of blood and plasma in or out of a patient with a medical device having a needle and a shield, comprising the steps of:
inserting the needle and the shield into the patient;
displacing the needle rearwardly such that the needle is disposed within the shield in the patient; and
transferring said one of blood and plasma through the shielded needle while a portion of the device is inserted in the patient.

A3

8. A medical device, comprising:
a hollow housing;
a needle having a sharpened tip projecting forwardly from the housing;
a biasing element biasing the needle rearwardly;
a needle retainer releasably retaining the needle against the rearward bias of the biasing element
a shield fixedly attached to the housing, projecting forwardly from the housing;
the shield having a forward edge and being configured for insertion into a patient;
the shield sheathing the needle such that in a projecting position, the

sharpened tip of the needle projects beyond the forward edge of the shield, and in a retracted position the sharpened tip is enclosed within the shield;

wherein upon actuation of the needle retainer, the biasing element displaces

A3
the needle rearwardly so that the sharpened tip of the needle is enclosed within the shield, wherein the shield is substantially puncture resistant wherein the axial force required to buckle the shield is less than the force necessary to puncture the shield with the needle to prevent inadvertent contact with the contaminated needle.

9. The medical device of claim 8 comprising a lock for locking the needle in the retracted position to substantially permanently retain the needle against being re-extended into the projecting position.

10. The medical device of claim 8 wherein the biasing element is a spring.

11. The medical device of claim 8 comprising a connector in fluid communication with the needle for attaching a fluid device for fluid transfusion through the needle.

A4

12. The medical device of claim 8 comprising a stop operable to limit the rearward displacement of the needle, wherein the stop is positioned such that the displacement of the needle from the projecting position to the retracted position is less than the length of the shield.

13. The medical device of claim 1 comprising a lock for locking the needle in the retracted position to substantially permanently retain the needle against being re-extended into the projecting position.

14. The medical device of claim 1 wherein the biasing element is a spring.

15. The medical device of claim 1 comprising a connector in fluid communication with the needle for attaching a fluid device for fluid transfusion through the needle.

16. The medical device of claim 1 comprising a stop operable to limit the rearward displacement of the needle, wherein the stop is positioned such that the displacement of the needle from the projecting position to the retracted position is less than the length of the shield.

17. The method of claim 2 comprising the step of locking the needle in the shielded position to substantially permanently prevent the needle from being re-extended to re-expose the needle.

18. The method of claim 2 wherein the step of retracting comprises retracting the needle such that the needle remains in the patient after retraction.

19. The method of claim 5 comprising the step of locking the needle in the shielded position to substantially permanently prevent the needle from being re-extended to re-expose the needle.

20. The method of claim 5 wherein the step of displacing comprises actuating an actuator such that a biasing element displaces the needle.

REMARKS

In an Official Action dated June 13, 2002, the Examiner rejected claims 1 and 8 under §112 as reciting items that lacked antecedent basis. In addition, the Examiner rejected claims 1-8 under §102 as anticipated by U.K. published patent application no. GB 2,248,021 to Song et al. However, Song et al. is directed to a different problem, so that Song does not teach or suggest several features of the pending claims. Accordingly, Applicants request that the Examiner reconsider the rejection of claims 1-8 and favorably consider claims 9-20.